

Redhead Grass Fact Sheet

Description:

Potamogeton perfoliatus, usually called redhead grass, is a **perennial** species of submerged aquatic vegetation and is one of the most easily recognized SAV species in the Bay. It has slender, straight stems that are reddish or whitish in color. The flat oval leaves have slightly curled edges and visible veins and measure 1-4 cm (1/3-1 1/2 in.) in length and 1-2 cm (1/3-2/3 in.) in width. The leaf arrangement is **alternate** or slightly **opposite** and the base of the leaf wraps around the plant's stem. Redhead grass has an extensive root and **rhizome** system that anchors the plant securely to the bottom.



Distribution:

Redhead grass is native to the Chesapeake Bay and thrives in fresh to moderately brackish waters. It is found in the upper Bay and in many Maryland rivers and grows best in quiet water with slow moving currents. Because the leaves are wide, they may be more likely to be covered with **epiphytes** like algae than the leaves of other SAV. These epiphytes may reduce the amount of light that reaches the leaves of the redhead grass.



Reproduction:

Reproduction in redhead grass can occur both sexually (through seed formation) and asexually.

Sexual reproduction takes place during early to mid-summer when spikes of tiny flowers grow from the ends of plant stems and extend above the water surface. Pollen from these flowers is spread by the wind. A dark colored fruit develops which sinks below the surface where it releases the enclosed seeds. The fruit can survive higher-than-normal salinities which allows the plant to survive periods of drought.



Asexual reproduction in redhead grass occurs through the formation of resting buds (**tubers**) at the ends of the rhizomes. New shoots will develop from these buds in the spring.

Importance:

Redhead grass is an excellent food source for waterfowl, especially redhead ducks. (In fact, the plant was named for the duck!) All parts of the plant are eaten by many species of waterfowl. However, the tubers buried in the bottom substrate are particularly nutritious and are an important source of winter food.

The roots, rhizomes and **stolons** of redhead grass help to reduce erosion and provide shelter for benthic algae and invertebrates. Its foliage provides shelter, support and an increased oxygen supply for aquatic animals. Redhead grass also acts as a nutrient buffer by using dissolved nitrogen and phosphorus for growth. This helps reduce algae blooms by making the nutrients unavailable for the algae.



Vocabulary:

Alternate (alternately) – not arranged in pairs; leaves alternate direction along the stem

Asexual reproduction – in plants, reproduction by cell division rather than by seeds; also called vegetative reproduction

Epiphyte – a plant that grows on another plant and depends on it for support but not for nutrients **Opposite** – leaves arranged directly across from each other along a stem

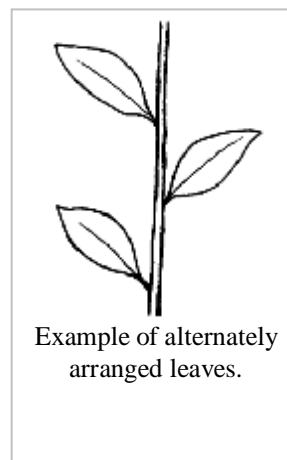
Perennial – a plant that lives more than two years

Rhizome – horizontal stem either lying on the sediment surface or buried; usually with roots and new shoots at stem nodes

Sexual reproduction – in plants, reproduction by means of seeds

Stolon – a horizontal, above-ground branch from the base of a plant that produces new plants from buds at its tip or nodes; also called a runner

Tuber – a vegetative (asexual) bud buried in the sediment and usually formed at the end of runners; capable of remaining dormant before growing into a new plant.



Redhead Grass

Read for Understanding Questions

1. Why is *Potamogeton perfoliatus* called redhead grass?
2. How would you recognize redhead grass?
3. Why might having wide leaves sometimes be a problem for redhead grass?
4. Give three reasons why redhead grass is important.



Redhead Grass

Read for Understanding Answers

1. Why is *Potamogeton perfoliatus* called redhead grass? *It is called redhead grass because it is the favorite food of redhead ducks.*
2. How would you recognize redhead grass? *Redhead grass has reddish or whitish stems and flat oval leaves with visible veins. The leaves are approximately 1 ½ inches long and 2/3 inch wide. The base of the leaf wraps around the stem.*
3. Why might having wide leaves sometimes be a problem for redhead grass? *The wide leaves are more likely to be covered with plants called epiphytes. These epiphytes may block the amount of sunlight that reaches the leaves of the redhead grass.*
4. Give three reasons why redhead grass is important.
 - *Redhead grass provides food for many species of waterfowl. All parts of the plant can be eaten, but the tubers are especially important.*
 - *Helps reduce erosion*
 - *The roots provide shelter for benthic algae and invertebrates*
 - *The foliage provides shelter, support and oxygen for aquatic animals*
 - *The plant acts as a nutrient buffer by using nutrients for growth. This helps prevent algae blooms.*

